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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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EXAMINER

CHANG, SUNRAY

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2121

DATE MAILED: 08/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/834,918

Applicant(s)

LE ET AL.

Examiner

Sunray Chang

Art Unit

2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 101602 and 111501.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

**Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. **Claims 1, 13, and 25 are rejected** under 35 U.S.C. 102(e) as being anticipated by Jean Walrand (U.S. Patent No. 6,674,760, and referred to as Walrand hereinafter).
2. **Regarding independent claims 1, 13, and 25**, Walrand teaches,
  - A method of classifying [classify, Col. 2, Line 28] Internet Protocol data [data stream, Col. 2, Line 28] to be sent from a source apparatus to a destination apparatus [end-to-end, Col. 2, Line 19] in a packet switch network [pocket-switch network, Col. 1, Line 11].
  - Receiving data at a first node [the first accesses node in a sub-network that receives an IP packet, Col. 2, Line 33 – 34].
  - Classifying [classifies] data at the first node [first accesses node] based on source routing information [IP destination address, IP source address, and a class of service identifier] of said data [IP packet] [Col. 2, Line 34 – 36].

3. **Regarding dependent claims 8, 20, and 33**, Walrand teaches, data [IP packet, Col. 2, Line 34] is received at said first node [first accesses node, Col. 2, Line 33] from said source apparatus [source, Col. 2, Line 35].

4. **Regarding dependent claims 9, 21, and 34**, Walrand teaches, reserving [allocate] resources of nodes [resources] from said source apparatus to said destination apparatus [end-to-end connection]. [Col. 2, Line 36 – 38]

5. **Regarding dependent claims 10, 22, and 35**, Walrand teaches, forwarding a request from source apparatus to first node [recognizes which end-to-end connection the packet belongs to, Col. 2, Line 36 – 37].

6. **Regarding dependent claims 11, 23, and 36**, Walrand teaches, storing source routing information at first node [first accesses node in a sub-network that receives an IP packet, Col. 2, Line 33 – 34].

7. **Regarding dependent claims 12, 24, and 37**, Walrand teaches, forwarding data from first node to a second node [data streams for both inter-subnet and intra-subnet connections, Col. 2, Line 28 - 29].

**Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. **Claims 2 – 4, 14 – 16, 26 – 28, and 29 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Walrand, and in view of Jacob W. Jorgensen (U.S. Patent No. 6,452,915, and referred to as Jorgensen hereinafter).

(Walrand as set forth above generally discloses the basic inventions.)

9. **Regarding Claims 2, 14 and 26**, Walrand teaches, source routing information is provided within a routing header of said data [Col. 2, Line 29 – 30].

Walrand does not teach, the data for IPv6.

Jorgensen teaches, IP of network layer can be Ipv4 or an IPv6, for the purpose of upgrading.

It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Walrand to include "the data for IPv6" for the purpose of upgrading.

10. **Regarding Claims 3, 15 and 27**, Walrand teaches, classifying is based on a destination address [Col. 2, Line 34 – 35] provided within router header [Col. 2, Line 30].

11. **Regarding Claims 4, 16 and 28**, Walrand teaches,

- routing header [IP headers, Col. 2, Line 30] includes a segments left field [class of service identifier, Col. 2, Line 35 – 36], a first destination address field [IP source address, Col. 2, Line 35] and a last destination address field [IP destination address, Col. 2, Line 34 – 35].
- Classifying [classifies, Col. 2, Line 34] is based on information within last destination address field [IP destination address, Col. 2, Line 34 – 35] of routing header [IP headers, Col. 2, Line 30].

12. **Regarding Claim 29**, Walrand teaches, Classifying [classifies, Col. 2, Line 34] is based on information within last destination address field [IP destination address, Col. 2, Line 34 – 35] of routing header [IP headers, Col. 2, Line 30].

13. **Claims 5 – 7, 17 – 19, and 30 – 32 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Walrand, and in view of Jorgensen , and further in view of Charles E. Narad (U.S. Patent No. 6,157,955, and referred to as Narad hereinafter).

14. **Regarding Claims 5, 17, and 30**, Walrand teaches, source routing information is provided within a routing header of said data [Col. 2, Line 29 – 30].

Walrand does not teach, routing header with IP options like LSRR and SSRR, and the data for IPv4.

Jorgensen teaches, IP of network layer can be Ipv4 or an IPv6.

Narad teaches, IP options in IP header [Col. 93, Line 43], header contain IP options [Col. 97, Line 39 – 41], and IP options, for example, LSRR, SSRR [Col. 96, Line 47 and 49]

It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Walrand to include "routing header with IP



Art Unit: 2121

options like LSRR and SSRR, and the data for IPv4” for the purpose of using in different conditions.

15. **Regarding Claims 6, 18, and 31**, Walrand teaches, classifying is based on a destination address [Col. 2, Line 34 – 35] provided within router header [Col. 2, Line 30].

Walrand does not teach, routing header with IP options like LSRR and SSRR, and the data for IPv4.

Jorgensen teaches, IP of network layer can be Ipv4 or an IPv6.

Narad teaches, IP options in IP header [Col. 93, Line 43], header contain IP options [Col. 97, Line 39 – 41], and IP options, for example, LSRR, SSRR [Col. 96, Line 47 and 49]

It would have been obvious to a person of ordinary skill in the art at the time of applicant’s invention to modify the teaching of Walrand to include “routing header with IP options like LSRR and SSRR, and the data for IPv4” for the purpose of using in different conditions.

16. **Regarding Claims 7, 19, and 32**, Walrand teaches,

- routing header [IP headers, Col. 2, Line 30] includes a segments left field [class of service identifier, Col. 2, Line 35 – 36], a first destination address field [IP source

address, Col. 2, Line 35] and a last destination address field [IP destination address, Col. 2, Line 34 – 35].

- Classifying [classifies, Col. 2, Line 34] is based on information within last destination address field [IP destination address, Col. 2, Line 34 – 35] of routing header [IP headers, Col. 2, Line 30].

Walrand does not teach, routing header with IP options like LSRR and SSRR, and the data for IPv4.

Jorgensen teaches, IP of network layer can be Ipv4 or an IPv6.

Narad teaches, IP options in IP header [Col. 93, Line 43], header contain IP options [Col. 97, Line 39 – 41], and IP options, for example, LSRR, SSRR [Col. 96, Line 47 and 49]

It would have been obvious to a person of ordinary skill in the art at the time of applicant's invention to modify the teaching of Walrand to include "routing header with IP options like LSRR and SSRR, and the data for IPv4" for the purpose of using in different conditions.

### **Conclusion**

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Narad et al. (U.S. Patent No. 6,401,117) discloses an IP options, a SSRR, a LSRR, a

Art Unit: 2121

classifying, pocket-process platform. Narad et al. (U.S. Patent No. 6,421,730) discloses an IP options, a SSRR, a LSRR, a classifying, pocket-process platform.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunray Chang whose telephone number is 703-305-8744. The examiner can normally be reached on M-F 7:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on (703)308-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-746-3506.

Sunray Chang  
Patent Examiner  
Group Art Unit 2121  
Technology Center 2100  
U.S. Patent and Trademark Office



Anthony Knight  
Supervisory Patent Examiner  
Group 3600

August 24, 2004